



## ATTACHMENT A

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### Remarks

By this Amendment, independent claims 1, 24, and 44 (and withdrawn independent claim 56) have been amended to better define the invention. In addition, new dependent claim 63-70 have been added to more fully claim the present invention. It is submitted that the present application is in condition for allowance for the following reasons.

The invention as now defined in independent claims 1 and 24 (and 56) distinguishes from the cited Batchelder patent in that the return light is deviated by altering one of its properties, and then that a beam splitter is used that imparts a deviation that is a function of that altered property. The two properties disclosed in the specification are polarization and wavelength. The polarization axis is optically rotated by various mechanisms, including the pair of Kerr Cells (22,24) in figure 1; the chiral medium beam splitter 122 of figure 8; the tubular cylindrical magnet 146 surrounding a cylindrical piece of glass 144 in figure 9; and interaction of the incident beam with the sample. The wavelength is changed principally by the interaction of the incident beam and the sample. These various embodiments are thus additionally claimed in new claims 63-70.

The Batchelder patent is newly cited and applied against independent claims 1 and 24 as well as dependent claims 2 and 9 for want of novelty. However, it is submitted that there is clearly no disclosure or teaching in the Batchelder patent of the

present invention as now additionally defined in claims 1 and 24 as amended, in the claims depending therefrom, or in withdrawn (and currently amended) claim 56.

The Examiner also cites the Batchelder patent against the inventive step of independent claim 44 and dependent claims 11 and 12. The Examiner states that the use of known illumination to enable a broader return beam would have been obvious depending on the type of imaging. However, the Examiner has neglected to consider a key issue when making this statement. Basically, the Examiner's contention is that this approach would have been obvious "depending on the type of imaging to be performed." However, claim 44 – which is hereby amended to clarify its scope – makes no reference to imaging. Rather, it defines an embodiment, illustrated in figure 11, in which no imaging need be performed. In particular, it should be noted that claim 44 as amended merely refers to "detecting at least some of said portion of said beam of returning light". No geometry or optics for that detection are defined, as imaging is not an object of this aspect of the invention. In such a context, it is thus submitted that it is by no means obvious to employ a beam broader than the incident beam so that "a portion of said beam of returning light avoids retracing the path of said incident or excitatory beam."

It should also be understood that the aspect defined in claim 44 and shown in figure 11 uses this technique as a primitive form of beam splitter. There is certainly no disclosure in the Batchelder patent or elsewhere of such a technique for splitting a beam, despite its simplicity and consequent ease of constructions and robustness.

It is therefore submitted in view of the foregoing that independent claim 44 as amended, and claims 45-46 depending therefrom, are patentable over the disclosure of the Batchelder patent.

With respect to dependent claims 11 and 12, it is submitted that these dependent claims are allowable at least for the same reasons as discussed above for independent claim 1 from which these claims depend.

Finally, the Examiner cites the combination of the Batchelder patent and the Harris patent against the patentability of dependent claims 10 and 18. As will be appreciated from the above, it is submitted that these claims (as amended as a consequence of their dependency) are patentable over the cited art for the same reasons as claim 1 from which they depend.

As noted above, new dependent claims 63-70 have been added to further claim the present invention. It is submitted that these new claims are allowable at least for the same reasons as independent claim 1 from which they depend. Additionally, it is submitted that the specified features are not shown or made obvious by the cited references.

The remaining references which were cited but not applied have been reviewed but are not believed to be pertinent to the patentability of the present invention.

For all of the foregoing reasons, it is submitted that the present application is in condition for allowance and such action is solicited.